#### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

## FORM 8-A

(Amendment No. 1)

#### FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

## **XORTX THERAPEUTICS INC.** (Exact name of registrant as specified in its charter)

British Columbia (State or other jurisdiction of incorporation or organization)

Suite 4000, 421 – 7<sup>th</sup> Avenue SW, Calgary, Alberta Canada (Address of principal executive offices) N/A (I.R.S. Employer Identification No.)

> T2P 4K9 (Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which
to be so registered	to be registered
Common Shares, no par value	The Nasdaq Stock Market LLC

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c) or (e), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d) or (e), check the following box.

If this form relates to the registration of a class of securities concurrently with a Regulation A offering, check the following box.  $\Box$ 

Securities Act registration statement or Regulation A offering statement file number to which this form relates: File No. 333-258741

Securities to be registered pursuant to Section 12(g) of the Act:

None (Title of Class)

### EXPLANATORY NOTE

This Amendment No. 1 to the registration statement on Form 8-A of XORTX Therapeutics Inc. (the "Company"), initially filed on September 29, 2021 (the "Form 8-A"), is filed for the purpose of correcting the name of the exchange on which the Common Shares will be listed. Except as described in the foregoing sentence, no other changes have been made to the Form 8-A.

# INFORMATION REQUIRED IN REGISTRATION STATEMENT

### Item 1. Description of Registrant's Securities to be Registered.

The description of the Common Shares, no par value, of XORTX Therapeutics Inc. (the "Registrant") under the heading "Description of Share Capital" in the prospectus included in the Registrant's Registration Statement on Form F-1 (File No. 333-258741), as initially filed with the Securities and Exchange Commission on August 12, 2021, including exhibits, as amended on September 16, 2021, and as it may be subsequently amended (the "Registrant pursuant to Rule 424(b) under the Securities Act of 1933, as amended, shall be deemed to be incorporated by reference herein.

Item 2. Exhibits.

Pursuant to the Instructions as to Exhibits for Form 8-A, no exhibits are required to be filed because no other securities of the Registrant are registered on The Nasdaq Stock

Market LLC and the securities registered hereby are not being registered pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

# SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

Date: October 1, 2021

XORTX Therapeutics Inc.

By: /s/ Allen Davidoff

Allen Davidoff Chief Executive Officer